

# RHEOLATE® 222

# Associative thickener for high shear-rate viscosity build in waterborne systems

#### **GENERAL INFORMATION**

RHEOLATE 222 is a 20% solids, VOC-free polyether polyurethane associative flow modifier for aqueous applications. It is designed for use in emulsion paints and other waterborne systems including inks, textile coatings, adhesives and sealants where maintaining viscosity at high shear during product application and improved film levelling are required.

RHEOLATE 222 can be used alone with small particle size latex systems or in combination with a co-thickener such as RHEOLATE 255 or RHEOLATE 266 if higher mid-shear (package) viscosity is required.

RHEOLATE 222 has shown more efficient high-shear viscosity development and improved flow and levelling in the newer VOC-free gloss and semi-gloss systems than most other viscosity modifiers.

# **CHEMICAL & PHYSICAL PROPERTIES**

Composition	polyether polyurethane resin
	solution in water
Colour	cloudy white
Non-volatile	19.5 - 20.5 %
Viscosity	max. 4000 mPa.s
	Brookfield RVT#3,
	spindle, 20 rpm
Carrier Solvent	100 % water
Density	1.03 g/cm <sup>3</sup>

These are typical properties not to be used for specification purposes.

#### **APPLICATIONS**

- High quality, low VOC latex paints
- High-gloss interior and exterior latex paints
- Semi-gloss interior and exterior latex paints
- · Flat interior and exterior latex paint
- Other latex systems requiring high film build and improved flow and levelling
- Inks
- Adhesives
- Textile coatings

#### KEY PROPERTIES

- Highly efficient high-shear rate viscosity build
- Excellent levelling
- Enhances film build and brush drag
- Good package viscosity development with small particle size latexes
- VOC-free
- Superior spatter resistance
- · Good colour acceptance
- Bio-stable
- pH independent
- Pourable liquid for easy addition
- Compatible with other thickeners
- Does not detract from gloss or wet adhesion

### **INCORPORATION**

RHEOLATE 222 can be used as supplied or, if necessary, further diluted with water. Addition can take place at any time during the formulation manufacturing process but incorporation into the millbase before letdown is recommended.

RHEOLATE 222 additive can be combined with other associative rheological additives, clay based thickeners or cellulosic thickeners for higher package viscosity and improved sag control.

RHEOLATE 222 is an associative rheological additive and is generally more efficient as the particle size of the latex emulsion decreases. This is due to the increased surface area of such emulsions. It is important to assess the effectiveness of RHEOLATE 222 in the complete system, while performance is also affected by other raw ingredients.

## **LEVELS OF USE**

Typical use levels of **RHEOLATE 222** are 0.5% to 5% (thickener solids weight) on total system weight.



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### **HEALTH AND SAFETY**

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

### STORAGE RECOMMENDATIONS

RHEOLATE 222 should be kept above 4°C (40°F). In the event of accidental freezing, thaw gently, spread a portion between glass slides and examine for granules. If found, do not use.

## SHELF LIFE

**RHEOLATE 222** has a shelf life of 2 (two) years from date of manufacture.

#### QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 / ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

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